

REMARKS

Prior Filed Supplemental Information Disclosure Statement

On October 6, 2005, the Applicant submitted a supplemental Information Disclosure Statement via fax to the Examiner providing three cited references for consideration. Enclosed is a copy of the confirmation of fax transmission showing the time stamps of the Central Fax Center and the OIPE/IAP. The Applicant respectfully requests acknowledgement of the submission of these references by return of the initialed substitute Form 1449. If the IDS did not reach the Examiner's desk, the Applicant is willing to provide the references via fax or e-mail at the Examiner's request.

Rejection of the Claims

The Examiner rejected claims 1-2, 11 and 26 under 35 U.S.C. § 102(e) as being anticipated by Cahill et al. (U.S. 5,963,659). Additionally, Claims 3-4 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cahill et al. as applied to claims 1-2, 11 and 26 above, and further in view of Holm (U.S. 3,949,363). The Examiner also rejected claims 9-10, 17-20 and 23-25 under 35 U.S.C. § 103(a) as being unpatentable over Cahill et al. as applied to claims 1-2, 11 and 26 above, and further in view of Grabowski et al. (U.S. 4,408,342 A). Additionally, the Examiner rejected claims 5 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Cahill et al. as applied to claims 1-2, 11 and 26 above, and further in view of Garner, IV et al. (U.S. 6,863,214 B2). Further, the Examiner rejected claims 6-8, 14-16 and 21-22 under 35 U.S.C. § 103(a) as being unpatentable over Cahill et al., in view of Grabowski et al. and Garner, IV et al. The Applicant respectfully traverses these rejections and in view of the following arguments requests reconsideration and withdrawal thereof. Finally, claims 11 and 17 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Pat. No. 6,654,487.

§102 Rejection of Claims 1-2, 11 and 26 over Cahill et al. (U.S. 5,963,659)

Pending claims 1-2, 11 and 26 are directed to a “financial item analysis method.” The method of claim 1 describes the stage in processing financial items where a financial item has been rejected due to an invalidated MICR line. Specifically, the claimed method applies character recognition processing digitally to the invalidated MICR line in the scanned image after the financial item has arrived in a reject pocket. Additionally, following invalidation of the financial item, the image of the financial item is processed digitally to identify the MICR characters in the previously invalidated MICR line.

In the section 102(e) rejection the Examiner states:

Cahill et al. teaches applying character recognition processing to an invalidated MICR line in a digital image of a financial item after the financial item has been sent to a reject pocket of a financial item sorter and digitally processing the digital image of the financial item having an invalidated MICR line to identify MICR characters therein. (Parentheticals and citations omitted.)

The Applicant respectfully differs with the Examiner’s interpretation of Cahill et al. For the reasons discussed below, the Applicant submits that the method of Cahill et al. does not disclose a digital process for identifying the MICR line following invalidation of the financial item.

In contrast to method of the pending claims, Cahill et al. does not describe digitally processing an invalidated MICR line to identify MICR characters. Rather, Cahill et al., at col. 14, lines 23-25, merely notes the use an OCR device and the fact that the checks are digitally imaged. This portion of Cahill et al. does not mention digitally processing the image to identify characters within an invalidated MICR line as required by claim 1.

In further contrast to the method of claim 1, Cahill et al. does not teach or suggest the application of digital processing to an invalidated MICR line. Rather, when the process of Cahill et al. finally determines that the MICR line is not readable, the check is transported to a repair station.

As noted at col. 20, lines 30-33, the repair station expedites the correction of the MICR line data which does not meet the acceptance criteria. According to col. 20, lines 54-56, the repair station does not use digital processing to repair the MICR line. Rather, the errors are highlighted and an individual operator manually enters the corrected data using a keyboard.

A careful review of Cahill et al. failed to discover any reference to digitally processing the digital image of a check having an invalidated MICR line. According to Cahill et al. disclosure, at to col. 16, lines 43-58, the only digital manipulation of the scanned images occurs when the MICR line is successfully decoded. At that time, the front and back images are merged. If the MICR line is not successfully decoded, the images are sent to the repair station. As noted above, the repair station of Cahill et al. does not use digital processing to resolve the errors in the MICR line. Thus, Cahill et al. does not teach or suggest digitally processing the digital image of a financial item having an invalidated MICR line to identify the MICR characters. Therefore, we respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-2, 11 and 26.

§103 Rejection of Claims 3-4 and 12 over Cahill et al. in view of Holm (U.S. 3,949,363)

Claims 3-4 and 12 depend from independent claims 1 and 11 respectively. In view of the foregoing arguments over the Cahill et al. reference, the independent claims are believed to be in condition for allowance. Therefore, claims 3-4 and 12 are also in condition for allowance. As such, the Applicant will only briefly discuss the Holm disclosure.

The Examiner cited Holm to provide for the recognized deficiencies of Cahill et al. stating, “Holm teaches changing digitally stored MICR line data for the check in response to digitally applying character recognition processing to the invalidated MICR line.” In support of the rejection, the Examiner cited col. 6, lines 41-42 and element 206 of Fig. 5.

Claims 3-4 and 12 are directed to a financial item analysis method wherein digitally stored MICR line data is changed in response to the application of digital character recognition processing to the MICR line in a digital image of the check thereby permitting identification of the MICR characters within the MICR line. As noted by the pending application in paragraph 51, the phrase “digitally applying character recognition processing,” describes a process which “specifically includes digitally processing such digital image of the item to identify MICR characters and thereby to find a digital image of the MICR line in the digital image of the item.” Thus, the current invention provides the ability to change the digitally stored MICR line data for the financial item in response to digitally applying character recognition processing to the invalidated MICR line in the digital image of the financial item.

In contrast to the pending claims, Holm does not teach or suggest digitally processing a digital image in a manner which changes the stored image or even the stored MICR line of the processed financial instrument. On review of col. 4, lines 11-25 cited by the Examiner, the Applicant respectfully submits that Holm does not describe the digital processing of a digital image as that term is used and defined by the pending application. Rather, as noted at col. 2, lines 3-5, the system of Holm merely provides a redundant character recognition system for sorting documents. Specifically, at col. 4, lines 9-11, Holm merges three inputs to produce a single output thereby reducing errors during processing. The portion of Holm identified by the Examiner discusses the merger of the inputs to create the single output. In contrast to the Examiner’s assertion, col. 4, lines 11-25 does not teach or suggest the manipulation of pixels within a digitally stored MICR line to produce a valid MICR line.

As further support for the rejection of claims 3-4 and 12, the Examiner cited col. 6, lines 41-42. The Applicant respectfully submits that the cited portion of Holm must be read in the context of the complete disclosure. On examination of col. 6, lines 37-47, one realizes that Holm

does not teach or suggest digitally manipulating a MICR line in digitally stored image of a check to identify MICR characters within the line. Rather, as noted by Holm in lines 37-40, if an error is found in the MICR data, the OCR data is examined. If the OCR data is suitable, then the MICR read data is replaced with the OCR data. However, if the image of the MICR line within the OCR data is invalid, Holm does not teach or suggest application of digital processing to the MICR line within the OCR data. Thus, Holm does not apply digital processing to the MICR line in a digital image of a check as that process is taught by the pending application.

In summary, the Applicant respectfully submits that Holm neither teaches nor suggests a financial item analysis method comprising digitally applying character recognition processing. Further, in rejecting the claims over the combination of Cahill et al. in view of Holm, the Examiner has used hindsight reconstruction in an attempt to pick and choose various parts of the prior art to emulate the current invention. Therefore, in view of the failings of both Cahill et al. and Holm to disclose the digital processing of a stored MICR line, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 3-4 and 12.

§103 Rejection of Claims 9-10, 17-20 and 23-25 over Cahill et al.
in view of Grabowski et al. (4,409,342)

In view of the foregoing arguments over the Cahill et al. reference, independent claims 1 and 11 are now believed to be in condition for allowance. Therefore, claims 9-10 and 17-18 are also in condition for allowance. Further, the foregoing arguments over Cahill et al. apply equally to the rejection of pending independent claims 19 and 24-25. Therefore, for the sake of conciseness those arguments are incorporated herein and will not be repeated.

Independent claim 19 provides a check sorting system wherein a check digital image is digitally processed when a MICR line is determined to be invalid by a MICR interpreter. As discussed above, Cahill et al. does not apply digital processing to the optical scan of the check.

Rather, Cahill et al. clearly require manual correction of any errors in the check. Further, Grabowski et al. neither teach nor suggest digitally imaging the entire check. Rather, Grabowski et al. digitally image only the MICR line portion of the check. Thus, a separate digital image of the check is not available for processing in the methods of Grabowski et al. Finally, the cited art does not teach or suggest the digital processing of a scanned check image following invalidation of the MICR line by a MICR line reader. Therefore, the Applicant respectfully submits that the combination of Grabowski et al. with Cahill et al. does not render claim 19 obvious.

Independent claims 24 and 25 specifically note the generation of two distinct sets of data. According to the invention of claims 24 and 25, the first data set is provided by MICR reader which reads a MICR line and communicates the resulting data to a controller. The second set of data is obtained by digitally imaging the check. If the electric signal representing the MICR line of the first data set is determined to represent an invalid MICR line, the claimed invention utilizes digital processing of the second data set to identify the MICR line and the characters contained therein. Once a valid MICR line is found in the second data set, the determined MICR characters are written to the first data set.

In contrast to the invention of claims 24 and 25, neither Cahill et al. nor Grabowski et al. disclose an automatic process wherein a second data set consisting of a digital image is used to correct a first data set. As discussed above and described at col. 20, line 48 – col. 21, line 10, the repair station 4 of Cahill et al. clearly requires manual intervention to complete the repair process. While the method of Cahill et al. digitally scans the MICR line and optically scans the check, the two data sets generated by these operations are not used to correct the MICR line without the need for manual entry. Rather, the data sets of Cahill et al. are merely compared to determine the existence of inconsistencies and the need to send the check to the repair station. See col. 18, line 65 through col. 19, line 4.

As to Claims 24 and 25, the disclosure of Grabowski et al. does not provide for Cahill et al.'s deficiencies. Specifically, the disclosure of Grabowski et al. does not teach or suggest the generation of two separate data sets. Rather, as described at col. 3, lines 6-35, the method of Grabowski et al. merely scans the MICR line and applies a character finding algorithm to generate a data block for use in a character recognition process. The method of Grabowski et al. does not scan the entire check and does not suggest the use of a second data set derived from the check to correct a first data set. Clearly, the cited art fails to teach or suggest the digital processing of a second data set for use in correcting an invalidated MICR line (a first data set) obtained by a MICR line reader without the need for manual processing. Therefore, in view of the differences between the claimed invention and the cited art, the Applicant respectfully request reconsideration and withdrawal of this rejection.

In view of the foregoing arguments over the rejections of independent claims 19, 24 and 25, the Applicant believes that these claims are clearly allowable over the cited art. Accordingly, dependent claims 20 and 23 are also in allowable condition.

§103 Rejection of Claims 5 and 13 over Cahill et al. in view of Garner, IV et al. (U.S. 6,863,214)

The Examiner rejected claims 5 and 13 over the combination of Cahill et al. (col. 16, lines 24-27) in view of Garner, IV et al. (elements 114, 116 of Figure 2B and col. 4, lines 38-46). The Applicant respectfully traverses this rejection and requests reconsideration and withdrawal thereof.

The foregoing arguments over Cahill et al. are equally applicable to this rejection and will not be repeated for the sake of conciseness. Turning now to Garner IV et al., the Applicant respectfully disagrees with the Examiner's interpretation of the Garner IV et al. disclosure.

Specifically, on careful review of col. 4, lines 38-46, the Applicant failed to find any reference to a method for digitally changing the orientation of a digital image. This particular

section of Garner, IV et al. neither teaches nor suggests manipulating the stored digital image in the manner described and claimed in the pending application. Further in contrast to the pending claims, Garner, IV et al. fails to teach or suggest a method which automatically reorients the check by digital processing in response to a failure to find the digital image of the MICR line. Rather, Garner, IV et al. at col. 6, lines 25-28 teaches a manual reorientation of the check when an operator flips or rotates the image of the check. The manual reorientation method described by Garner, IV et al. neither teaches nor suggests the digital processing step described by the pending claims.

In order to clarify the claimed process, claims 5 and 13 have been amended to clearly indicate that the reorientation step applies digital processing after the failure to discover the MICR line. Support for the amendments to claims 5 and 13 is found in paragraph 51 of the pending application which states:

Thus, the first indicated decision of the preferred embodiment in FIG. 8 determines whether the MICR line can be found at a predetermined location of the retrieved image. If it cannot be found, the method continues as shown in FIG. 8 by determining whether all orientations of the digital image have been checked. If they have not, the orientation is changed by digital processing and the reoriented digital image is checked to see if the MICR line can then be found.

Therefore, in view of the differences between the pending claims and the cited art, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

§103 Rejection of Claims 6-8, 14-16 and 21-22 over Cahill et al.

in view of Grabowski et al. and Garner, IV et al.

In the final §103 rejection, the Examiner rejected pending dependent claims over each of the previously discussed references. The foregoing arguments over the cited references apply equally well to the rejection of dependent claims 6-8, 14-16 and 21-22 and will not be repeated herein for the sake of conciseness. In view of the foregoing arguments, the Applicant respectfully submits that

the pending claims are not obvious in view of the cited art. Therefore, the Applicant requests reconsideration and withdrawal of this rejection.

Obviousness Type Double Patenting Rejection of Claims 11 and 17
over Claim 17 of U.S. Pat. No. 6,654,487.

In order to overcome this rejection, a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) is submitted herewith. In view of the terminal disclaimer, Applicant request that the Examiner withdraw the obviousness-type double patenting rejection.

Conclusion

In view of the foregoing arguments over the rejections of claims 1–26 and the amendment to claims 5 and 13, the Applicant respectfully request that the Examiner reconsider and withdraw the rejection of the pending claims. A formal Notice of Allowance of Claims 1–26 is earnestly solicited. Should the Examiner care to discuss any aspect of the foregoing response in greater detail, the undersigned attorney would welcome a telephone call.

Respectfully submitted,



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